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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. APPLICATION NO. **FILING DATE** S0A-246 R GIOSCIA 11/23/98 09/197,506 **EXAMINER** WM01/0126 CHOW, C RONALD P KANANEN RADER FISHMAN & GRAUER **ART UNIT** PAPER NUMBER THE LION BUILDING 2684 1233 20TH STREET N W SUITE 501 WASHINGTON DC 20036 DATE MAILED: 01/26/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/197,506

Applicant(s)

R. Gioscia

Examiner

Charles Chow

Group Art Unit 2684



Responsive to communication(s) filed on <u>11/23/98</u>	
☐ This action is FINAL.	
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quay/1835 C.D. 11; 453 O.G. 213.	
A shortened statutory period for response to this action is set to expirelonger, from the mailing date of this communication. Failure to respond withi application to become abandoned. (35 U.S.C. § 133). Extensions of time mag CFR 1.136(a).	In the bellog for response will cause the
Disposition of Claim	
	is/are pending in the applicat
Of the above, claim(s)	is/are withdrawn from consideration
☐ Claim(s)	is/are allowed.
X) Claim(s) 1-26	is/are rejected.
☐ Claim(s)	is/are objected to.
☐ Claims	are subject to restriction or election requirement.
Application Papers See the attached Notice of Draft person's Patent Drawing Review, PT The drawing(s) filed on	y the Examiner. S ☐ approved ☐ disapproved. S.C. § 119(a)-(d). documents have been al Bureau (PCT Rule 17.2(a)).
 Acknowledgement is made of a claim for domestic priority under 35 to Attachment(s) ★ Notice of References Cited, PTO-892 ★ Information Disclosure Statement(s), PTO-1449, Paper No(s). Interview Summary, PTO-413 ★ Notice of Draftsperson's Patent Drawing Review, PTO-948 Notice of Informal Patent Application, PTO-152 	
SEE OFFICE ACTION ON THE FOLL	OWING PAGES —

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 1. Claims 1, 2, 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Rovira et al. (US 5,239,540).

Rovira et al. discloses **claim 1**, "a method of providing listeners with information about audio programming being digitally broadcast comprising combining a data signal carrying contextual information about said audio programming with an audio signal carrying said audio programming ", See in abstract, in Fig. 1, 5, 6, 8, it shows the apparatus and method for transmitting, receiving, and communicating the audio broadcast program data signals which are combined with digital data signals, having compressed digital audio multiplexed with the program information, such as the title, the digital audio track, the artist information, the record label, the year, and transmits the combined signals via satellite to a receiving station. The receiving station de-multiplexes signals and sends the combined signal to subscriber's digital tuner for separating the digital audio from the program data. The digital audio is decoded in ASIC, and the program data is processed by the microprocessor. The decoded audio program data is displayed on the display device, while listening to the audio. It also shows in Fig. 7, the input device, keyboard 207, the controlling processor 203, and the display 209 for audio programs. In column 4, line 1-8, it also shows the means of

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communication could be via wireless communication.

Rovira et al. discloses **claim 2**, "broadcasting said combined data and audio signals as a digital radio signal". See in column 2, line 19-23, and in column 2, line 30-34, it shows the digital transmission information contains the where the audio program information is combined with the digital audio, and the signal transmission can be coaxial cable or via satellite.

Rovira et al. discloses **claim 4**, "display said contextual information of said data signal on a display device of said receiver". See in column 3, line 39-49, in column 8, line 59-68, and in column 9, line 45-55, it shows the processing and displaying of the audio program data for displaying information to user. It shows the separating of program data signal using ASIC and stored the data into internal memory of the microprocessor and sending data to display 209.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rovira et al. in view of White et al. (US 5,596,373).

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Rovira et al. disclosed **claim 3**, "receiving said combined data and audio signals with a receiver; separating said data and audio signals". See in column 2, line 66 to column 3, line 5, it shows the decoding the selected one digital signal and the one corresponding program data signal so as to separate the corresponding program data signal from the selected one digital signal.

Although Rovira et al. disclosed the converting of the digital audio signal to the left, right audio outputs, utilizing digital to analog converter 160, Rovira et al. does not explicitly indicate the transducing into audible sound.

White et al. teach "receiving said combined data and audio... separating said data and audio signal; transducing said audio signal into audible sound", see in abstract, in column 4, line 14-22, it shows the converting of digital audio signal using D/A to the left, right audio outputs. In column 12, line 15-16, it shows the speaker is utilized for the audio output. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add White et al.'s speaker for digital audio output, to Rovira et al., as modified above, such that the digital audio could be listen by the user.

3. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rovira et al. in view of Freeny, Jr. (US 5,694,162).

Rovira et al. as modified above does not explicitly indicate the transceiver.

Freeny, Jr. teach claim 5, "a transceiver for receiving said broadcast signal", see in title, in

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abstract, in Fig. 1, in column 2, line 43-65, and in column 3, line 8-20, it shows method and apparatus for automatically changing broadcast programs based on the audience response. The audience receiver unit 22a, 22 b, receives the broadcast digital program. The audience response unit 24a, 24b transmits the audience user selected program to the broadcast network control system 14 for subsequently broadcast the user selected audio programs from broadcast network transmitter system 12 of the system 10.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Freeny, Jr.'s audience receiver 22a, 22b, and response unit 24a, 24b, to Rovira et al. as modified above, such that the user selected audio program could be transmitted to the broadcast network also.

Regarding "a receiver for receiving a broadcasting signal which is an audio signal and a data signal combined, said data signal containing contextual information about audio programming carried by said audio signal"; "a signal processor for separating said audio and data signals; and an audio output device for outputting said audio signal", refer to the patent disclosure discussion in claims 1-4 above for the claimed features.

Regarding claim 6, 7, refer to the patent disclosure discussion in claim 1 above which has introduced above, having the disclosed feature for user input device for controlling the display device for textual information, from Rovira et al., as shown in Fig. 7, keyboard 207, processor 203, and display 209.

4. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rovira et al. in

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view of Freeny, Jr., and further in view of Mankovitz (US 5,703,795).

Rovira et al. as modified above does not explicitly indicate the memory cartridge.

Mankovitz teaches claim 8, "a memory cartridge for storing at least a portion of said contextual information of said data signal", see in abstract, in Fig. 3, 4, in column 9, line 7-16, it shows a broadcast system for providing information to the user for identifying the playing station and the time to play the audio program. The broadcast information could be recorded to the memory cartridge tape as shown in Fig. 3, and retrieved from the tape cartridge.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Mankovitz's memory cartridge tape, to Rovira et al. as modified above, such that recorded audio album data could be utilized at other location for replaying of the audio.

Regarding claim 9, 10, refer to the patent disclosure discussion in claim 8 above which also provides the disclosed features for this claim.

Rovira et al. teach claim 11, "a connection between said processor and a service provider over", see in abstract, in Fig. 1, it shows the method and apparatus for transmitting and receiving the digital data signal for the corresponding broadcasting programs. In column 2, line 19-22, and in column 4, line 5-8, it shows the system is to provide program information for digital audio transmitted to subscribers, and the program information is combined with the digital audio. The communication link could be on the telephone wires,

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or coaxial cable or wireless means.

Rovira et al. as modified above does not include the transmitting of the selected program. Freeny, Jr. teach "at least a portion of said contextual information may be transmitted to identify particular audio programming to said service provider", see in column 2, line 43-65, and in column 3, line 8-20, it shows the transmitting of the audience responded selection of audio program to the network system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Freeny, Jr.'s transmitting of the audience responded selection of the audio program to network, to Rovira et al. as modified above, such that the listener' audio selection could be transmitted to the broadcast system for desired audio.

Regarding claim 12, refer to the patent disclosure discussion in claim 11 above which also provides the disclosed features for this claim.

Regarding claim 13, refer to the patent disclosure discussion in claim 8 above which also provides the disclosed features for this claim.

5. Claims 14-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rovira et al. in view of Freeny, Jr., and further in view of Rovira et al., and further in view of Takahisa (US 5,579,537).

Rovira et al. as modified above does not explicitly indicate the wireless connection.

Takahisa teaches claim 14, "said connection to said service provider is a wireless connection", see in abstract, in column 17, line 46-55, it shows the broadcast system in which digital data are transmitted along with audio. The communication link could be using the

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wireless link.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Takahisa's wireless link for broadcast audio program data, to Rovira et al. as modified above, such that the audio digital data could be implemented to the wireless communication system.

Regarding claims 15, 16, refer to the patent disclosure discussion in claims 1-5 above which also provides the disclosed features for this claim.

Regarding claims 17, 24, refer to the patent disclosure discussion in claim 7 above which also provides the disclosed features for this claim.

Regarding claim 18, refer to the patent disclosure discussion in claim 8 above which also provides the disclosed features for this claim.

Regarding claims 19, 21, 22, 26, refer to the patent disclosure discussion in claims 1-5, 11 above which also provides the disclosed features for this claim.

Regarding claim 20, refer to the patent disclosure discussion in claim 4 above which also provides the disclosed features for this claim.

Regarding **claim 23**, refer to the patent disclosure discussion in claims 1, 4 above which also provides the disclosed features for this claim.

Regarding claim 25, refer to the patent disclosure discussion in claims 1, 8 above which also provides the disclosed features for this claim.

Conclusion

6. In view of the above discussion, Rovira teaches the apparatus and method for transmitting,

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receiving, and communicating the audio broadcast program data signals which are combined with digital data signals, having compressed digital audio multiplexed with the program information, such as the title, the digital audio track, the artist information, the record label, the year, and transmits the combined signals via satellite to a receiving station. The receiving station de-multiplexes signals and sends the combined signal to subscriber's digital tuner for separating the digital audio from the program data. The digital audio is decoded in ASIC, and the program data is processed by the microprocessor. The decoded audio program data is displayed on the display device, while listening to the audio. It also shows the input device, keyboard 207, the controlling processor 203, and the display 209 for audio programs. It also shows the means of communication could be via wireless communication. White et al. teaches the speaker for digital audio output. Freeny, Jr. teach the audience receiver 22a, 22b, and response unit 24a, 24b, for transmitting audience selected audio program to the network system for user desired audio selection. Mankovitz-795 teaches the memory cartridge tape. Takahisa teaches the wireless link for broadcast audio program data.

- 7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Below is a list of the cited prior arts.
 - 1. US 5,119,503, June 1992, Mankovitz teaches the apparatus and method for broadcasting auxiliary data in an FM stereo broadcasting system. The auxiliary data is broadcast together with the regular musical audio, in order for user to identify and select the broadcast audio from the received auxiliary data in relation to the broadcast audio program album. It shows the user input panel 100, and the features for recalling, saving, and deleting of the audio program. It shows the receiver has the demodulation 118, the processor 120 for separating the auxiliary program data from the musical audio. It shows the display control 110 for controlling of the textual information displaying on display 106. It shows the user operated storage for storing the contextual auxiliary data from the broadcast for selection of audio program. It also shows the purchasing of the order of the broadcast audio program. It shows the transmitting of the audio musical selections and auxiliary data in the form of a digital message signal representing a text message which includes the name of the musical selection, the name of the artist, the name of the album on which the selection is located, immediately prior to or after the audio program.

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- 2. US 5,694,455, Dec. 1997, Goodman teaches the mobile audio program selection system using public switched telephone network, having the feature for transmitting user selected information to the mobile switching office responsive to the user selection signal inputs, and operable for broadcasting the formatted user selected information.
- US 5,732,216, March 1998, Logan et al. teach the audio message exchange system, as shown in Fig.
 the system organizes and transmits program segments to client subscriber. The program segments are associated with descriptive subject matter segments for generating both text ans audio cataloging presentations to enable the user to more easily identify and select desirable programming. In column 22, line 49, to column 23, line 10, it shows the removable cartridge for storing the audio program.
- 8. The Group and/or Art Unit location of your application in the PTO has changed.

To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2684.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (703)-306-5615.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Hunter, can be reached at (703)-308-6732.

Any response to this action should be mailed to:

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Or Faxed to: (703)-308-6306 (for formal communications intended for entry)

Or hand-delivered to: Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor, Receptionist.

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For general inquiry or relating to the status of this application should be directed to the

Group Receptionist whose telephone number is (703)-305-4700

C. Chow

Jan./22/2001.

DANIEL HUNTER

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